

U.S.S.N.: 09/915,791

## II. Amendments to The Specification

[0010] Referring to Figures 2 and 3, a rotor assembly 10 for an electric device comprises a hub 12 fixedly connectable to a crankshaft 14 of an engine, a rotor 16 fixedly connected to said hub 12 for operational engagement with a stator 17 (not shown) of the electric machine, and an elastomeric dampener 18 disposed between and interconnecting the hub 12 and the rotor 16 to dampen torsional vibration from the engine.

[0017] Referring to Figure 1, preferably, the electric device is mountable to a vehicle drive train, wherein the drive train includes an engine 54, a crankshaft 14 on the engine, and a transmission 56. The hub 12 is fixedly connectable to the crankshaft 14 of the engine, while the stator (not shown) is mountable to the engine independently of the crankshaft 14. The hub 12 is mounted to the crankshaft 14 on an end of the engine opposite the transmission. The rotor 16 is fixedly connected to the outer flange 34 of the hub 12 and disposed within the stator for operational engagement with the stator 17. The elastomeric dampener 18 is disposed between and interconnects the hub 12 and the outer flange 34 to provide torsional dampening to the crankshaft 14. In the preferred embodiment, the hub 12 is connectable to the crankshaft 14 on a side of the engine opposite the transmission.

[0018] Preferably, the electric device has two modes of operation, such as a starter/generator. The first mode of operation is as an electric starter for the engine 54. When an electric current is fed to the starter generator, the rotor 16 rotates within the stator 17 thereby forcing the crankshaft 14 to rotate correspondingly. This mode is used to provide initial rotation of the crankshaft 14 to start the engine 54. The second

U.S.S.N.: 09/915,791

mode of operation is as a generator. After the engine 54 is started, the electric current being fed to the starter/generator is cut off. As the crankshaft 14 spins under the power of the engine 54, the rotor 16 continues to rotate within the stator 17, thereby generating electrical energy which can be fed from the starter/generator to be used elsewhere in the vehicle.